

Cultivating Corn in July.

The cultivation of the corn crop should receive very particular attention this month, as upon the effectiveness of this work will largely depend how far the present backward and unpromising condition of the crop is to be improved upon. With such cultivation as can, and ought to, be given, and with the moisture now in the land, if we have only hot weather this condition can be so improved as to bring the yield nearly up to the average. Few farmers appreciate what an important factor the presence of abundant moisture in the land is to the well doing of the corn crop and how necessary it is to conserve it. In experiments made at the Wisconsin Experiment Station it has been found that it requires about 310 pounds of water to produce a single pound of dry matter. By figuring up the amount of dry matter in an 80-acre field of corn and multiplying by 310, the pounds of water that are required to produce the crop will be secured. The result is astonishing.

It does not seem possible that such an enormous quantity of moisture can be secured by the corn plants during the growing season, and, more important than all, this moisture, in most part, is used during July and August, the months of least rainfall in the year; so it can easily be seen that the conservation of the moisture in the soil is an exceedingly important problem, and one which every corn grower in the country will find it profitable to investigate.

The Illinois Station conducted exhaustive tests of the comparative amount of moisture conserved by the different methods of cultivation. Two things were found to be true: First, that deep cultivation conserves soil moisture; and, second, that frequent cultivation conserves the moisture most effectively of all plans of cultivation. It was found that in the deep cultivations, despite the excess of moisture, the yield was very low, compared with shallow culture. To find the cause of this an extensive series of experiments with the pruning or cutting off of the roots of the corn plant was conducted.

In this root-pruning experiment a field of corn was selected and one row was root-pruned two inches deep. This root-pruning was done with a broad, sharp blade. The spade was pushed down into the soil and a guard allowed it to penetrate just to the depth planned for in the experiment. The whole field was cultivated with a weeder and all weeds not removed in this way were cut by hand. This was done so that the rows of corn would receive equal cultivation and be under like conditions. The pruning was done three times in the season at about the ordinary times of cultivation. The second row was not pruned and the third row was pruned four inches deep. The fourth row was not pruned and the fifth row was pruned six inches deep. This was repeated until a large field was treated in this manner.

The resulting yields were as follows for three seasons: Not pruned, 62 bushels an acre; pruned two inches deep, 60 bushels an acre; pruned four inches deep, 45 bushels an acre; pruned six inches deep, 30 bushels an acre.

In fact, these, and all other similar experiments, simply prove that any injury to the roots of the plants reduces the yield. The amount of this reduction was about in proportion to the number of roots cut off. These experiments explain very clearly the reduction of the yield by deep cultivation.

The results of experiments, and from practical experience, are to the effect that continued cultivation, keeping a loose mulch on the surface of the soil, gives the best results. The general practice coming into vogue among the most progressive and successful corn growers is that after corn reaches a height to interfere in cultivating with the ordinary two-horse cultivator, to use a single horse with a five-tooth harrow or drag and cultivate between the rows of corn during the setting of the ears on the stalks. The yields to the acre of 100 bushels have been secured by this plan, and experience has proved it to be practical and successful on a large scale.

With the results of these experiments before you cultivate shallow, cultivate frequently, and the result with the land so full of moisture, as it now is, will probably be a yield of corn which may suffice to make good the deficiency which an ungenial May, and consequent late planting, threatens.—July Southern Planter.

Hints on Feeding Poultry.

Sitting hens should be as well fed as those that are laying, but the feeding should be different. Grain should be left where they can get it whenever they desire to come off the nest. This is done not only as a matter of convenience but also to insure the hen's getting all they want to eat, and also to get them into the habit of coming off regularly; which they will be more apt to do if they know the food is always obtainable. It is better to feed all whole grain in good variety; such as corn, oats and wheat. The reason is that all the food a sitting hen requires is for her bodily maintenance. She is a non-producer and will therefore be able to satisfy her needs without soft food, vegetables or meat, though a little of these will be a benefit. The danger lies in feeding so much vegetable food as to loosen the bowels or so much meat as to stimulate a desire to discontinue sitting and go to laying.—From Country Life in America.

The Savage Bachelor: "I don't see why a man should get married when a good parrot can be bought for \$25.00." The Sweet Young Thing: "As usual, woman is at a disadvantage. A grizzly bear can't be bought for less than ten times that."—Indianapolis Journal.

A Batch of Timely Farm Notes.

Editor of The Progressive Farmer:

The reporters and editors treated Dr. Wiley's Government experiments with feeding borax-preserved food to his "boarders" with so much levity that the Doctor some time ago refused to talk about it, but Secretary Wilson states that the experiments are to be continued for some time to come.

The information sought to be obtained is to what extent the human system is affected by eating certain adulterated foods. It is a subject of high importance, but it is a question whether even the most careful digestion experiments of months or even a limited number of years will actually show very much. The human system is naturally resistant. When poisoned, every effort is made by the entire system to co-operate and throw off the poison. Thus where food is but slightly poisoned it would seem that a vigorous constitution might not show serious results for many years, until the digestion and general health became finally undermined.

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The office of Experiment Stations is gratified at the demand which is being made for the short "Farm Experiments," being used as farmer's bulletins, under the title, "Experiment Work."

It is the purpose of the Department to put before the farmer the practical results of the various Experiment Stations throughout the country. "The results reported, however," said Dr. F. W. True, chief of the division, "should for the most part be regarded as tentative and suggestive rather than conclusive. Further experiments may modify them, and experience alone can show how far they will be useful to each farmer in actual practice. The work of the stations must not be depended upon to produce 'Rules for Farming.' How to apply the results of experiments to his own conditions will ever remain the problem of the individual farmer."

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Modern harvesting machines are now in use by farmers of twenty-nine nations of the earth. They are mostly American types or employ American patents. They are estimated to represent in their ability to harvest crops, the labor of 20,000,000 men; and yet the papers are full of the difficulty the farmers have in obtaining hands.

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Baron Von Flugge, one of the party of German noblemen and large land owners which has been making a tour of the United States in a study of our agricultural methods, says in an interview that the "American farmer has not learned to enjoy life. He works until he is fifty years old like a slave before he thinks of taking any enjoyment."

The estimable German overlooks the difference in condition between the American who owns his farm, or who is at least working hard with that end in view, and his own coun-

trymen who rent portions of great estates with no hope of making and owning their own homes. When the American farmer rises with the sun, it is to sweep his eye over acres that are his own, and when he tramps forth it is into fields that no man can lawfully step upon without his consent. And finally when he reaps and stores his products they are for his own and his family's benefit, not to be divided with a wealthy landlord, who, through education and long experience in tenantry, sees to it that the farmer makes only a living and nothing more. The Baron Von Flugge has viewed merely the muscular efforts of the American farmer without considering that the mental attitude plays an important part in the lightness or heaviness of all work.

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In treating cattle for lice, poisonous substances must be avoided as all cows have the habit of licking themselves and each other. A tobacco solution will kill lice.

GUY E. MITCHELL.

Washington, D. C.

Successful Trucking About Wilmington.

Asparagus is grown very extensively, and is found very profitable by all truckers. Fine celery has been grown here and I have tried its culture with great success. Beans, peas and all of the small vegetables pay handsomely. Tomatoes flourish very freely in this soil, and with proper arrangements for shipping, can be advantageously raised. I have a place at Rocky Point, about fifteen miles from the city, upon which I planted seven and a half acres in strawberries; the proceeds of this venture amounted to \$2,000, enabling me to buy a piece on the opposite side of the road at about \$8.00 per acre.

There is no trouble about labor in this country. We have good trucking lands around Wilmington which are about a month earlier than Norfolk and a month later than Charleston. I pick about 4,000 or 5,000 quarts of strawberries per week, and get about twelve cents per quart for them. The expense of picking, manure and freight is about seven cents per quart, leaving about five cents net. Frequently we get as high as fifty cents per quart for strawberries; an acre of very good land will yield 5,000 quarts, but poor land will not bring more than 2,000.

I make my own fertilizer with acid phosphate and fish scrap. I can raise stock to advantage by the use of cotton-seed meal and cotton-seed hulls, which are obtainable at the mills here at slight cost. The manure from the animals helps to pay their way along, and good mich cows are always salable at high prices. The improved blackberry can be grown to advantage. Good farming lands can be obtained from \$8.00 per acre up; these are near railroads, furnishing good shipping facilities. The price of land cheapens back from the railroad lines, and would depend, necessarily, upon the character of the land as well as its susceptibility to improvement.—Giles Westbrooke, New Hanover Co., N. C., in New York Agriculturist.